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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,697	08/30/2001	Armin Amrhein	A34463 (071308.0222)	9229

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 BAKER BOTTS L.L.P.
 PATENT DEPARTMENT
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 AUSTIN, TX 78701-4039

EXAMINER

CHANG, SUNRAY

ART UNIT	PAPER NUMBER
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2121

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	09/942,697		AMRHEIN ET AL.	
	Examiner		Art Unit	
	Sunray Chang		2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20061208</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in responsive to the paper filed on November 27th, 2006.

Claims 6 – 15 are presented.

Claims 6 – 15 are rejected.

Claim Objections

2. Claim 1 is objected to because of the following informalities: “an first bus coupled with” and “a main clock for the industrial controller is selected form the ... (clocks)” need appropriate corrections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. **Claims 6, 10 and 13 – 14 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Terrence L. Blevins (U.S. Patent No. 6,445,963 and referred to as **Blevins** hereinafter), and in view of Edmund Choung et al. (U.S. Patent No. 6,564,329 and referred to as **Choung** hereinafter).

Regarding independent claims 6, 10 and 13 – 14,

Blevins teaches,

- An automation system comprising: an industrial controller for integrating a plurality of automation components in a uniform configurable running model of a respective runtime system of the industrial controller [an advanced control block implements multiple-input/multiple-output control, such as model predictive control, neural network modeling or control, within a process control system in a manner that is integrated with the control blocks implemented using a control paradigm, such as the Fieldbus paradigm, Col. 4, lines 22 – 28].

Choung teaches

- the industrial controller comprising a plurality of bus interfaces and an internal timer for generating an internal clock; a first bus coupled with a first bus interface of the plurality of bus interfaces of the industrial controller, wherein the first bus interface comprises a bus timer; a first external device coupled with the industrial controller through a second bus with a second bus interface of the plurality of bus interfaces of the industrial controller, the first external device comprising a clock source, a technical process coupled with said first bus, the technical process comprising a clock generator, wherein a main clock for the industrial

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controller is selected from the internal clock or the bus timer or the clock source or the clock generator. [an ASIC has a clock controller that dynamically selects an appropriate clock frequency for a resource, Abstract; further, the system clock controller contains multiple instances of the circuitry ... particular resource or clock ... select ... memory clock ... bus clock ... CPU clock ... peripheral clock, Col. 8, lines 57 – 67; see further Fig. 3 and Fig. 4] for the purpose of dynamic clock generation [Col. 1, lines 1 – 2].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Blevins** to include “the industrial controller comprising a plurality of bus interfaces and an internal timer for generating an internal clock; a first bus coupled with a first bus interface of the plurality of bus interfaces of the industrial controller, wherein the first bus interface comprises a bus timer; a first external device coupled with the industrial controller through a second bus with a second bus interface of the plurality of bus interfaces of the industrial controller, the first external device comprising a clock source, a technical process coupled with said first bus, the technical process comprising a clock generator, wherein a main clock for the industrial controller is selected from the internal clock or the bus timer or the clock source or the clock generator”, for the purpose of dynamic clock generation [Col. 1, lines 1 – 2].

4. **Claims 6 – 9, 11 – 12 and 15 are rejected** under 35 U.S.C. 103(a) as being unpatentable over **Blevins** in view of **Choung**, and further in view of Steven J. Altschuler (U.S. Patent No. 6,778,971 and referred to as **Altschuler** hereinafter).

Regarding dependent claims 7 and 11,

Blevins teaches an automation system; [Col. 4, lines 22 – 28]

Choung teaches clock sources, bus clock, dynamic clock generation [Abstract, Col. 8, lines 57 – 67, and Fig. 3 & 4]

Altschuler teaches,

- prioritizing the system and user level tasks. [Col. 13, Lines 21 – 36] for the purpose of analyzing computer-based tasks to build task models. [Col. 1, lines 1 – 3]

Regarding dependent claims 8 and 12,

Altschuler teaches,

- user level tasks are loaded into the at least one user level. [Col. 7, Lines 30 – 38] for the purpose of analyzing computer-based tasks to build task models. [Col. 1, lines 1 – 3]

Regarding dependent claims 9 and 15,

Altschuler teaches,

- programmed accessing overall functionality from the user programs. [Col. 3, lines 14 – 44]

Response to Amendment

5. RCE has been filed on November 27th, 2006.

Claim Rejections - 35 USC § 112 and 101

6. Applicants overcome both the 101 and 112 first paragraph rejections, the examiner has withdrawn the rejections

Claim Rejections - 35 USC § 103

7. Applicants indicate clearly that the clock sources are ready in the network for an apparatus to make a selection making the invention away from the teaching of **Altschuler** reference; yet, further reference has been cited for new ground of rejections in current office action.

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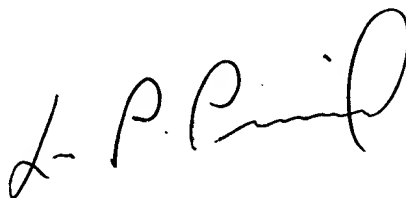
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. via telephone number (571) 272-3682 or facsimile transmission (571) 273-3682 or email sunray.chang@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687.

The official facsimile transmission number for the organization where this application or proceeding is assigned is (571) 273-8300.

Anthony Knight
Supervisory Primary Examiner
Group Art Unit 2121
Technology Center 2100
U.S. Patent and Trademark Office



LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

December 22, 2006